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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/505,148	01/12/2005	Paul A Cameron	118989-04313564	5706				
20583 JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017	7590 04/03/2007		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>COONEY, JOHN M</td></tr></table>		EXAMINER	COONEY, JOHN M		
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SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/505,148

Applicant(s)

CAMERON ET AL.

Examiner

John m. Cooney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2-8-07 has been entered.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8, 18-21, and 34-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants' limitation "hydroxyl compound formed from a single polyester" recited in claim 1 is a limitation which lacks support in applicants' originally filed supporting disclosure. This is a new matter rejection.

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There is no support for exclusive employment of a "single" polyester as now claimed, and there is no support for forming a hydroxyl compound from a polyester compound as now claimed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8, 18-21, and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' claims are confusing as to intent because it can not be determined what treatment of the reaction product is intended by the claim defined "form from" language. While it can be seen how a "hydroxyl polyester" can be formed from or derived from the reactants defined by the claims, it is not seen how a hydroxyl compound can be "formed from" a polyester formed from or derived from the reactants defined by the claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8, 18-21, and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' claims are confusing as to intent because it can not be determined what degrees of material inclusion or exclusion are intended to be embodied by the employment of the term "single" in the claims. This confusion is further exacerbated by the fact that claims such as claim 2 refer to "each" polyester and other permutations in the formation of the polyester containing component of the claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vinches et al.(4,602,079) in view of Limerkens et al.(5,840,782).

Vinches et al. disclose preparations of polyurethane elastomers having good hydrolysis resistance based on the reaction of polyester polyols derived from the reaction of dimer fatty acids and other acids such as adipic acid with polyols such as diethylene glycol, polyisocyanate prepolymers prepared from isocyanates and the

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polyester polyols disclosed, and chain extenders, all employed for their reactive effects, wherein, further, elastomers prepared from isocyanate-terminated prepolymers based on the described polyester polyols are reacted with chain extenders to form shaped articles including shoe soles (see column 1 lines 25-31, column 3 line 23 – column 7 line 63, the examples, and the entire document). Vinches et al. provides for other carboxylic acid in amounts meeting the ratios of the claims, and provides for the inclusion of trimer contents to the degrees claimed (column 4 lines 54-55).

Vinches et al. differs from the claims in that microcellular foam formation is not particularly recited. However, Limerkens et al. recites employment of water at time of reaction in the making of related polyurethane microcellular foams used in shoe soling applications for the purpose of imparting the foaming effect (see column 3 line 65 – column 4 line 24, as well as, the entire document). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed water in the manner taught by Limerkens et al. in the preparation of the articles of Vinches et al. for the purpose of imparting cushioning and weight reducing effects to the articles realized in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

The following arguments were set forth in the Office action dated 8/8/06 and are maintained again herein:

Applicants' arguments have been considered but are unpersuasive and the rejection is maintained for the reasons set forth above. It is maintained that the

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references are properly combined for the reasons set forth above, and it is maintained that a prima facie case of obviousness has been established.

That the primary reference discloses provisions for the presence of some degree of water does not negate or overcome the rejection as set forth above. The secondary reference is looked to for teachings of means for enacting foaming in polyurethane elastomers to form microcellular foam structures. Whether the amounts of water included/allowed for in the preparations of Vinches et al. leads to formation of microcellular foam structures to some degree is not an issue set forth by the examiner in light of the fact that Vinches et al. is silent as to microcellularity and other cell structures in the articles of their invention. However, this disclosure of Vinches et al. does not negate the combinability of Vinches et al. with a reference which goes into the microcellular foam structure arising from the use of water and other blowing agents and the controls of density associated with their use.

Applicants' recitation of tensile strength retention values in their claims has been considered. However, based on difference in the make-up of the compositions claimed over those of Vinches et al. not being established, it is seen that these physical characteristics are qualities which would be possessed by the compositions disclosed by Vinches et al. Accordingly, such features of the claims are not seen to be differences under 35 USC 103. This recitation in the claims does not relieve applicants of their burden to demonstrate new or unexpected results attributable to the differences indicated in the rejection above which are commensurate in scope with the scope of the claims as they currently stand. At this time a sufficient showing of new or unexpected results has not been made evident.

Applicants' latest arguments have been considered. However, rejection is maintained for the reasons set forth above. Distinction based on the "hydroxyl compound formed from a single polyester" as now set forth in the claims is not seen as the language is not seen to define distinctions in preparations arriving from the combinations of the teachings set forth in the rejection above. In considering showings of new or unexpected results, the following need to be considered:

**Result Must Compare to Closest Prior Art:**

Where a definite comparative standard may be used, the comparison must relate to the prior art embodiment relied upon and not other prior art – *Blanchard v. Ooms*, 68

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USPQ 314 – and must be with a disclosure identical (not similar) with that of said embodiment: *In re Tatincloux*, 108 USPQ 125.

#### Results Must be Unexpected:

Unexpected properties must be more significant than expected properties to rebut a prima facie case of obviousness. *In re Nolan* 193 USPQ 641 CCPA 1977.

Obviousness does not require absolute predictability. *In re Miegel* 159 USPQ 716.

Since unexpected results are by definition unpredictable, evidence presented in comparative showings must be clear and convincing. *In re Lohr* 137 USPQ 548.

In determining patentability, the weight of the actual evidence of unobviousness presented must be balanced against the weight of obviousness of record. *In re Chupp*, 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *In re Beattie*, 24 USPQ 2d 1040.

#### Claims Must be Commensurate With Showings:

Evidence of superiority must pertain to the full extent of the subject matter being claimed. *In re Ackerman*, 170 USPQ 340; *In re Chupp*, 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *Ex Parte A*, 17 USPQ 2d 1719; accordingly, it has been held that to overcome a reasonable case of prima facie obviousness a given claim must be commensurate in scope with any showing of unexpected results. *In re Greenfield*, 197 USPQ 227. Further, a limited showing of criticality is insufficient to support a broadly claimed range. *In re Lemin*, 161 USPQ 288. See also *In re Kulling*, 14 USPQ 2d 1056.



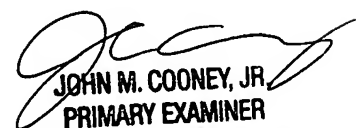
Applicants' have not persuasively demonstrated unexpected results for the combinations of their claims. Comparisons have not been related to the prior art embodiment relied upon. Applicants have not demonstrated their results to be clearly and convincingly unexpected and more significant than being secondary in nature. Applicants' showings are not commensurate in scope with the scope of combinations now claimed.

As to the amount values of new claims 35-36, these are values contained in or close in overlap with other claims of applicants' invention and are addressed in the rejection and arguments above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY, JR.  
PRIMARY EXAMINER  
Group 1700